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PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/672,328	09/29/2000	James A. Belmont	99104CON	1547
75	90 09/11/2002			
Michelle B Lando Esq			EXAMINER	
Cabot Corporation			OH, TAYLOR V	
Law Departmen			On, ta	LORV
157 Concord Ro			ART UNIT	PAPER NUMBER
Billerica, MA 01821-7001				
			1625	
			DATE MAILED: 09/11/2002	!

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application No.	Applicant(s)				
	09/672,328	BELMONT, JAMES A.				
Office Action Summary	Examiner	Art Unit				
	Taylor Victor Oh	1625				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status 1)⊠ Responsive to communication(s) filed on <u>15 A</u>	ugust 2002					
<u> </u>	<del>-</del>					
, <u> </u>	s action is non-final.	responition as to the marite in				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims						
4)⊠ Claim(s) <u>1-31</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-4,6,7 and 20-31</u> is/are rejected.						
7)⊠ Claim(s) <u>5 and 8-19</u> is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120		) (4) (5)				
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
<ul> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>						
<ul> <li>Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)	- p 35 0.0.0. 35 120					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal I	/ (PTO-413) Paper No(s) Patent Application (PTO-152)				

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Applicant's arguments with respect to claims 1-31 have been considered but are moot in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 112

1. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a pigment such as blue, black, white, brown, cyan, green, violet, magenta, red, yellow and mixtures thereof, anthraquinones, phthalocyanine blues, phthalocyanine greens, diazos, monazos, pyranthrones, perylenes, heterocyclic yellows, quinacridones, and (thio)indigoids does not reasonably provide enablement for all the pigments in the chemical field. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, all the pigments unrelated to the current invention commensurate in scope with these claims. Therefore, the scope of the claim regarding the pigment is limited to the list of the pigment in the specification. An appropriate correction is required.

because the specification, while being enabling for one organic ionic group such as  $C_6H_4CO_2$ ,  $C_6H_4SO_3$ ,  $C_{10}H_6CO_2$ ,  $C_{10}H_6SO_3$ ,  $C_2H_4SO_3$ , and etc. does not reasonably provide enablement for all the organic ionic groups in the chemical field. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, all the organic ionic groups unrelated to the current invention commensurate in scope with these claims. Therefore, the scope of the claim regarding the organic ionic groups is limited

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to the list of the organic ionic groups in the specification. An appropriate correction is required.

because the specification, while being enabling for one amphiphilic counterion group such as cationic amphiphilic ions and anionic amphiphilic ions does not reasonably provide enablement for all the amphiphilic counterion groups in the chemical field. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, all the amphiphilic counterion groups unrelated to the current invention commensurate in scope with these claims. Therefore, the scope of the claim regarding the amphiphilic counterion groups is limited to the list of the the amphiphilic counterion groups in the specification. An appropriate correction is required.

## Claim Rejections - 35 USC § 102

- 2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
  - A person shall be entitled to a patent unless --
  - (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3 Claims 1-4, 6-7 and 20-28 are rejected under 35 U.S.C. 102(b) as being anticipated clearly by Adams et al (US 5,698,016).

Adams et al disclose a modified pigment such as carbon black having attached at least one organic group( see col. 5, lines 28-34) and at least an amphiphilic ( see col. 6, lines 25-36), which can have a charge opposite to that of the organic ionic group( see col. 1, lines 1-58);

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furthermore, for the organic group attached to the carbon, the organic group can be at least one aromatic group or one  $C_1$ - $C_{12}$  alkyl group (see col. 1, lines 1-58).

Furthermore, the reference does indicate that the formation of a non-aqueous or aqueous emulsion inkjet ink contains a suitable vehicle, binders and additives (see col. 9 lines 45-59). Moreover, Adams et al disclose a carbon black with a polymeric cationic amphiphile (see col. 20, lines 1-58) such as methyl acrylate, methyl methacrylate, butyl acrylate, styrene (see col. 4, lines 14-16). The claimed compounds are identical with the compounds disclosed in the reference.

## Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 6. Claims 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al (US 5,698,016) in view of Kato et al (US 5,731,115).

Adams et al. do disclose a modified pigment such as carbon black having attached at least one organic group and at least an amphiphilic, which can have a charge opposite to that of the organic ionic group; furthermore, for the organic group attached to the carbon, the organic group can be at least one aromatic group or one  $C_1$ - $C_{12}$  alkyl group which is directly attached to the carbon (see col. 5, lines 32-33); also, Adams et al. have pointed out the formation of a carbon black with a polymeric cationic amphiphile (see col. 20, lines 1-58) such as methyl acrylate, methyl methacrylate, butyl acrylate, styrene (see col. 4, lines 14-16). In addition, an ink may include a vehicle which functions as a carrier during printing and / or additives to improve printability and drying (see col. 8, lines 5-8).

However, Adams et al differ from the instant invention in that a print plate contains a substrate, a protective layer and an absorptive layer containing at least one modified pigment and

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a method of imaging a lithographic print plate using a laser is not disclosed, along with subjecting the plate to a solvent for the removal of portions from the imaged layer.

Kato et al disclose a preparation of a waterless lithographic printing plate by using a laser beam (see col. 3, lines 8-11). Furthermore, the photoconductive layer includes a substrate with a precoated layer (see col. 9, lines 40-50), charge generating agents including organic pigments (see col. 6, lines 65-67), such as carbon black (see col. 17, line 18). Moreover, in the wet process, the non-tacky resin layer is treated with a solvent to remove portions from the imaged layer (see col. 31, lines 13-15).

Adams et al do disclose the use of the carbon black with a polymeric cationic amphiphile as an ink which may include a vehicle which functions as a carrier during printing and /or additives to improve printability and drying (see col. 8, lines 5-8) and Kato et al do disclose the preparation of the waterless lithographic printing plate in which one of the ingredients such as the carbon black is included in the photoconductive layer.

Therefore, if the person having an ordinary skill in the art had desired to improve the properties of the printing plate such as printability of the printing plate, it would have been obvious to the skillful artisan in the art to have motivated to incorporate Adams et al's modified carbon black with a polymeric cationic amphiphile into the Kato et al 's preparation of the waterless

lithographic printing plate as an alternative to the ordinary carbon black with an expectation of a

similar success as in the Keto et al's process.

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7. Claims 5 and 8-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to T. Victor Oh whose telephone number is (703) 305-0809. The examiner can normally be reached on Monday through Friday from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alan Rotman, can be reached on (703) 308-4698. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4556.

N9/1102

ALAN L. ROTMAN
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alan L. Rotman